We claim:

1. A method for treating a manure stream for reduction in part to a solid particulate stream that is pathogen free, highly reduced in weight in comparison to the original input, and environmentally safe for bulk freighting to remote and widely distributed agricultural fields and then disposition there as a finely spread soil additive, comprising the steps of:

supplying a raw manure stream, inclusive of a certain organic vaporizing fraction chosen from fatty acids and/or natural oils or fats;

providing a main processor that operates at a level of vacuum whereby said vacuum level determines a given boiling temperature for that fraction that is lower than that fraction's boiling temperature at relatively elevated pressures;

pre-heating the raw manure stream at a pressure above the main processor's vacuum level in order to elevate the bulk temperature to above said given boiling temperature for that fraction as determined by said main processor's vacuum level without, however, boiling away that fraction in the raw manure stream by said pre-heating thereof;

introducing the pre-heated raw manure stream into the main processor through a pressure isolation device in order to preserve the main processor's vacuum level whereby a fractional percentage of that fraction's liquid phase in the pre-heated raw manure material flashes into vapor, this presumptively promoting material disintegration and pathogen destruction.

2. The method of claim 1 further comprising providing the main processor with a throughput of a hot pneumatic carrier for syphoning up and suspending suspension particles from out of the disintegrating manure material.

3. The method of claim 2 further comprising a vacuum source connected to a vacuum port in the main processor to suction out a pneumatic stream comprising the pneumatic carrier, vapors, and suspension particles.

4. The method of claim 3 further comprising a separation process between the vacuum source and the vacuum port of the main processor to separate the pneumatic stream into one component or set of components and another component or set of components, wherein said one component or set of components comprises substantially particle matter as said other component or set of components comprises variously the pneumatic carrier, vapors and perhaps ultra-fine particulate matter.

5. The method of claim 2 wherein the hot pneumatic carrier comprises a hot dry clean gas including hot air or, alternatively, hot flue/exhaust gases from a combustion process.

6. The method of claim 1 wherein the level of vacuum inside the main processor is preferably achieved down to or below essentially $\frac{2}{3}^{rds}$ an atmosphere.

7. The method of claim 6 wherein the level of pressure with the pre-heating process comprises generally the local barometric pressure of the geographic vicinity where said method is being carried out.

8. The method of claim 1 wherein and said pre-heated manure stream is introduced into the main processor at a mean bulk temperature measuring over 135°C.

9. A method for treating a manure stream for reduction in part to a solid particulate fraction that is suitable for bulk freighting to remote and widely distributed destinations, comprising the steps of:

supplying a raw manure stream inclusive of natural fatty acids and/or natural oils or fats;

providing a main processor that operates at a level of vacuum;

at a relatively elevated pressure, pre-heating the manure stream in order to elevate the mean bulk temperature to above what corresponds to a boiling temperature at the main processor's vacuum level for one of the natural fatty acids and/or natural oils or fats without boiling said one away; and

introducing the pre-heated manure stream into the main processor whereby a fractional percentage of said one of natural fatty acid and/or natural oil or fat flashes into vapor, this presumptively promoting the manure stream for disintegrating into a solid particulate fraction suitable for bulk freighting.

10. The method of claim 9 further comprising providing the main processor with a throughput of a hot pneumatic carrier for syphoning up and suspending particles of the solid particulate fraction from out of the disintegrating manure stream.

11. The method of claim 10 further comprising a vacuum source connected to a vacuum port in the main processor to suction out a pneumatic stream comprising the pneumatic carrier, vapors, and suspension particles.

12. The method of claim 11 further comprising a separation process between the vacuum source and the vacuum port of the main processor to separate the pneumatic stream

into one component or set of components comprising substantially particulate matter as well as into another component or set of components comprising variously the pneumatic carrier, vapors and perhaps ultra-fine particulate matter.

13. The method of claim 10 wherein the hot pneumatic carrier comprises a hot dry clean gas including hot air or, alternatively, hot flue/exhaust gases from a combustion process.

14. The method of claim 9 wherein the level of vacuum inside the main processor is preferably achieved down to or below essentially ⅔rds an atmosphere as the relatively elevated pressure of the pre-heating process comprises generally the local barometric pressure of the geographic vicinity where said method is being carried out.

15. The method of claim 9 wherein said pre-heated manure stream is introduced into the main processor at a bulk temperature measuring over 135°C.

16. A method of vacuum treating a manure stream comprising the steps of:

providing a vacuum processor that is horizontally elongated between first and second ends with an elongated auger,

suctioning a current of carrier gas into the vacuum processor by an inlet proximate the first end and out a vacuum port proximate the second end,

introducing the manure stream into the chamber proximate the first end and motivating the introduced manure stream towards the second end by the auger,

applying heat to the vacuum processor, and

causing the manure stream to disintegrate into fractions comprising gasified fractions and waftable particulate fractions amenable to suspension by the current of carrier gas for exiting the vacuum processor through the vacuum port along with the carrier gas and the

gasified fractions, as well as other non-suspending fractions when applicable which are discharged from the vacuum processor out a discharge port proximate the second end.

17. The method of claim 16 further comprising:

pre-heating the manure stream before introduction into the vacuum processor at a relatively elevated pressure above the vacuum processor's level of vacuum in order to preliminary gasify out portions of the gasified fractions.

18. The method of claim 17 further comprising:

introducing the pre-heated manure stream into the main processor through a pressure isolation system in order to promote preservation of the vacuum processor's vacuum level.

19. A method of vacuum treating a manure stream comprising the steps of:

providing a vacuum processor that extends between an inlet zone and a discharge zone with apparatus for mechanically motivating material from the inlet zone to the discharge zone;

suctioning a current of carrier gas into the vacuum processor by an intake proximate the inlet zone and out a vacuum port proximate the discharge zone;

introducing the manure stream into the chamber proximate the inlet zone and motivating the introduced manure stream towards the discharge zone by said apparatus;

applying heat to the vacuum processor, and

causing the manure stream to disintegrate into fractions comprising gasified fractions and waftable particulate fractions amenable to suspension by the current of carrier gas for exiting the vacuum processor through the vacuum port along with the carrier gas and the gasified fractions, as well as other non-suspending fractions when applicable which are discharged from the vacuum processor out a discharge port proximate the discharge zone.

20. The method of claim 19 further comprising:

pre-heating the manure stream before introduction into the vacuum processor at a relatively elevated pressure above the vacuum processor's level of vacuum in order to preliminary gasify out portions of the gasified fractions.